# THIRD REVIEW OF NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

Mountain Valley Stone, Inc. Brown's Canyon Quarry

> M/043/019 April 2, 2008

### R647-4-105 - Maps, Drawings & Photographs

#### General Comment:

Many of the comments below are generated because of a lack of specific (even conceptual) plans. The operation and reclamation plans for the expansion need to show to the best educated estimate of location, size, and volumes of features and materials involved with the proposed operation. Understand, that the Division realizes that plans developed and approved may vary from what actually ends up on the ground. If significant changes become the reality, then the approved plan should be amended to reflect the change (for example, changing the location of an overburden pile from the SW corner of the permit area to the NE corner of the permit area). Non significant changes (topsoil stockpile varies +/- 1percent) would not be cause to require a permit amendment. Since the Division must look at worst case scenarios for bonding calculations, it is important to provide a good estimation of volume of waste/overburden piles that need to be regraded, average distance of push, or haul, sizes of compacted areas that need ripping, etc. Under each subpart, the italicized writing is from the previous review. Normal writing is the Division's current comments regarding the status of each portion of the plan.

# 105.1 Topographic base map, boundaries, pre-act disturbance

The maps do not clearly show the areas and acres to be disturbed or that are currently disturbed. The original 2002 application had a map SP-1 at 1 inch equals 60 feet with clear labeling of mine areas, storage areas, diversion ditches, etc. The hatched areas on the more recent figures 1 and 2 are labeled but the labels are hard to read as they get lost in the hatching. Figure SP-1 in the original plan, but now eliminated, described and showed in better detail and was also at a scale of 1 inch equals 60 feet. This level of detail was not transferred onto the more recent maps or was left off entirely. The location of what areas are to be mined on figures 1 and 2 are not clearly labeled. Please label these figures with the level of detail of information found on figure SP-1.

What appears as the five year mine plan area on figure 2 is highlighted in yellow and is 33 acres. Within that 33 acres is a product stockpile area, (2) topsoil storage areas, a material processing and storage area, and a wetland area. It is unclear what area is to be mined within the yellow highlighted area as nothing is labeled in this regard. Please show this on Figure 2. (TM)

• This concern from the previous review has still not been addressed. Please clearly show where you are going to mine. Also show the location of all diversion ditches as shown on the original figure. (tm)

## 105.2 Surface facilities map

This map does not show the location of the overburden/waste piles in the expansion area. Please add these features to maps SP3, Fig. 1 and Fig. 2 (lk)

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Please show on a map the approximate location and extent of the area that will actually be mined, locations of any proposed highwalls, overburden and waste piles, roads, and other type(s) of impacts or disturbance that will occur over the proposed expansion area. (lk)

\* This concern from the previous review has not been addressed. For the correct calculation of the bond a complete map is needed. The topsoil stockpiles, overburden (waste dumps) and mining pits need to be clearly defined. Is the topsoil for years 1-3 and year 3-5 going to be adjacent to SR-50. The pit areas are not shown, only the highwalls have been shown. (lah)

## 105.3 Drawings or Cross Sections (slopes, roads, pads, etc.)

Cross-sections through the expansion area should be included showing the original surface, surface after mining and surface after reclamation. A minimum of two sections should be submitted, one in a east-west and one in a north-south direction. (lk) The Site Reclamation Maps (SP 2 and SP-3) for the site need to identify where the several different reclamation treatments, listed on these maps, will be used (please refer to comments under R647-4-110.5). (lk)

\* This concern has not been addressed. For the correct calculation of the bond complete cross sections are needed. On map SP-3 labels (2-5 years vs 3-5 years) are different than on Figure 2. Highwall grading and reclamation sections are inadequate and not to scale, bond calculations would be based on a worse case scenario. (lah)

#### R647-4-106 - Operation Plan

106.3 Estimated acreages disturbed, reclaimed, annually.

From Fig. 2, it appears that the total permitted area will be 58.5 acres. Please identify how much of this acreage will not be disturbed (i.e. the wetland area and buffer zone around this area). What will be the total acreage to be disturbed with this revision (include current permit area as well as expansion area). (lk)

\* This concern has not been addressed. For the correct calculation of the surety complete total acres to be disturbed and reclaimed annually is needed. Bond calculations will be based on a worse case scenario. (lah)

# 106,8 Depth to groundwater, extent of overburden, geology

The plan shows a new location of the well site on figure 2. What is the depth to groundwater and the relationship between the water level in the wetlands and the geologic formation in which the well will be developed? (TM)

\* This was not addressed completely, please provide the geologic information requested. (lah)

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# 106.9 Location & size of ore, waste, tailings, ponds

Location and size of overburden/waste piles for the expansion area are not shown on any of the maps. Please provide a map showing the location of these features (refer to comments under R647-4-105.2). (lk)

\* This concern has not been addressed. For the correct calculation of the bond complete location and size of the different material to be stockpiled and reclaimed annually is needed. Bond calculations will be based on a worse case scenario. (lah)

# **R647-4-108 - Hole Plugging Requirements**

The plan indicates that the water well drilled on site will be properly plugged upon abandonment. The surety calculation will need to include this as a line item. (lk)

\* Please include the drill hole diameter of the water well. (lah)

## R647-4-109 - Impact Assessment

109.1 Impacts to surface and groundwater systems

Please provide a copy of your Storm Water Pollution Prevention Plan. (tm)

# R647-4-113 - Surety

Before the amount of additional reclamation surety can be calculated, you will need to provide specific details regarding:

- Volume of waste/overburden that needs to be moved and the average distance to be moved (can it be regraded with a dozer, or will it need to be loaded on trucks to haul to different locations on the mine site).
- Cross sections of the mine site, showing the mined out grade as well as the reclaimed grade.
- Size of buildings, concrete pads, and other features that will need to be removed.
- Size of pits (quarry areas), pads, work areas, etc. that may require different reclamation treatments.
- Acreages that will receive different reclamation treatments (i.e. different soil depths, amendments, ripping/regrading, etc.

Please provide a list the reclamation tasks that need to be preformed, the unit basis of the cost (i.e. hours, cubic yards, etc. the # of units for each task, and the current cost for each unit.

\* This concern has not been addressed. Please address. (lah)